## EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan



**PUBLICATION NUMBER** 

PUBLICATION DATE :

07096293

11-04-95

APPLICATION DATE

05-08-92

APPLICATION NUMBER

04251830

APPLICANT: MASUDA TAKASHI;

INVENTOR:

UEDA AKIHISA;

INT.CL.

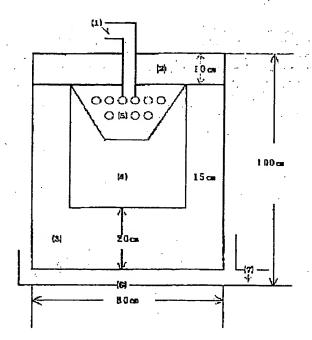
C02F 3/10 C02F 1/28

TITLE

**USAGE OF ACTIVATED CARBON** 

PREPARED BY PROCESSING RICE HUSK IN BIOLOGICAL TREATMENT

FOR PURIFYING SEWAGE.



ABSTRACT :

PURPOSE: To carry out absorption, decomposition and elimination of pollutants continuously in parallel by purifying sewage by bacteria while using activated carbon, which is rice husk smoked coal prepared by carbonizing rice husks in the same way as that for charcoal and whose absorptive activity is improved by chemical treatment.

CONSTITUTION: Rice husk smoked coal prepared by carbonizing rice husks in the same way as that for charcoal is boiled in an aqueous solution containing about 2-10% of sodium hydroxide and then washed with water. As a result, not yet carbonized substances in the rice husk smoked coal are eluted and scars are formed on the surface of the rice husk smoked coal and a large number of fine pores are formed the rice husk smoked coal to improve the absorption capacity of the coal as an activated carbon. Bacteria propagates in the fine pores and gaps and they are fixed there. A tank with a specific volume and made of water permeative foam urethane 2, 3 is filled with the activated carbon 4 and sewage is supplied through a flow inlet 1 to absorb pollutants and to purify it. The absorbed pollutants are decomposed and exinguished by bacteria carried on the activated carbon.

COPYRIGHT: (C)1995,JPO